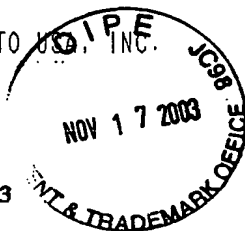


Nov. 17. 2003 2:00PM

AJINOMOTO USA, INC.

No. 2863 P. 2/6



DOCKET NO: 198462US23

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

PAUL SUMMER, ET AL.

: EXAMINER: LEVY, NEIL S.

SERIAL NO: 09/768,623

FILED: JANUARY 25, 2001

: GROUP ART UNIT: 1616

FOR: PRODUCTION OF FLOWABLE
COTTONSEED

DECLARATION UNDER 37 C.F.R. §1.132

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

I, Paul Summer, the undersigned, a citizen of the United States of America, one of the applicants of the above-captioned U.S. Patent Application No. 09/768,623, do hereby declare:

1. That I am a graduate of Iowa State University and received my M.S. degree in the year 1997
2. That I have been employed by Ajinomoto USA Inc. for 5 years as a technician in the field of nutrition
3. That the following comparisons and comparisons referred to in the specification was carried out by me or under my direct supervision and control.

TECHNOLOGY CENTER 2800

NOV 28 2003

RECEIVED

Nov. 17. 2003 2:00PM AJINOMOTO USA, INC.

No. 2863—P. 3/6

Application N . 09/768,623
Reply to Office Action of May 16, 2003

4. That I am familiar with the present application, its prosecution history, and the outstanding rejections over the cited references.

5. That I am familiar with the pending claims in the present application.

6. That I hereby state that the following remarks regarding procedure, result generation, and data interpretation is done so to the best of my knowledge in the related technical field and that I have read and understand all information herein.

7. In view of the Examiner's position shown in the Office Action mailed May 16, 2003, in order to demonstrate the unobviousness of the claimed methods, products, and compositions.

Two types of coated cottonseed were produced using the examples and description provided by Harris (A-B below). A fifth coated cottonseed was produced using our technology (C).

Nov. 17, 2003 2:00PM AJINOMOTO USA, INC.

No. 2863 P. 4/6

Application No. 09/768,623
Reply to Office Action of May 16, 2003

Samples Tested

- A: A solution containing 50% molasses (75 brix) and 50% water was adjusted to pH 1.6. Twenty-four grams of this solution was then added to 200 grams of whole cottonseed (12% by weight of cottonseed, as described by Harris) and dried at 82°C for about 2 hours.
- B: A solution containing 50% molasses, 48.5% water and 1.5% calcium hydroxide was mixed and found to have a final pH of 12.0. Twenty-four grams of this solution was then added to 200 grams of whole cottonseed (12% by weight of cottonseed, as described by Harris) and dried at 82°C for about 2 hours.
- C: A solution containing 15% phosphoric acid (85% concentrated), 42.5% molasses and 42.5 % water was mixed. This solution was added to whole cottonseed to equal 40% by weight of cottonseed (27% of total weight) The final step of adding calcium hydroxide (7.5% by weight of cottonseed; 5% of total weight) induced the exothermic salt-forming reaction that is the basis of this coating. The seeds were dried at 82°C for about 2 hours.
-

As a means of quantitatively describing the coatings and comparing with non-coated cottonseed, two measurements were obtained. First bulk density was analyzed and the results are shown in the table below. Secondly, flow-ability was recorded. This was done by placing 75 grams of each sample into a 1000ml Erlenmeyer flask, slowly turning the flask upside-down over a scale and recording the amount of cottonseed that flowed out in grams. Percent

flowability was calculated as the amount of cottonseed that flowed out of the flask divided by the original amount and multiplied by 100. The results are in the table. The coatings described by Harris increased both bulk density and flowability of cottonseed; however, our invention showed even further improvements. Figures 1 and 2 show how the flowability test was conducted and how well the cottonseeds were able to flow.

Table. Bulk density and flowability of cottonseeds.		
Treatment	bulk density grams/deciliter	Flowability, %
A: Harris:acid	31.02	52.24
B: Harris:alkali	28.65	45.55
C: Summer	40.85	100.00
non-coated Cottonseed	24.45	7.04

Figure 1. Coating sample C, (Summer). All cottonseeds were able to flow out.

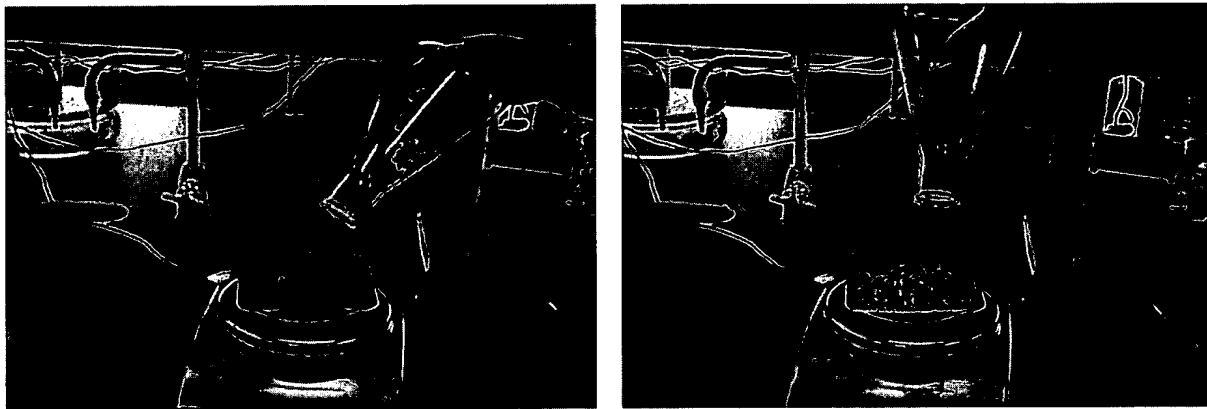
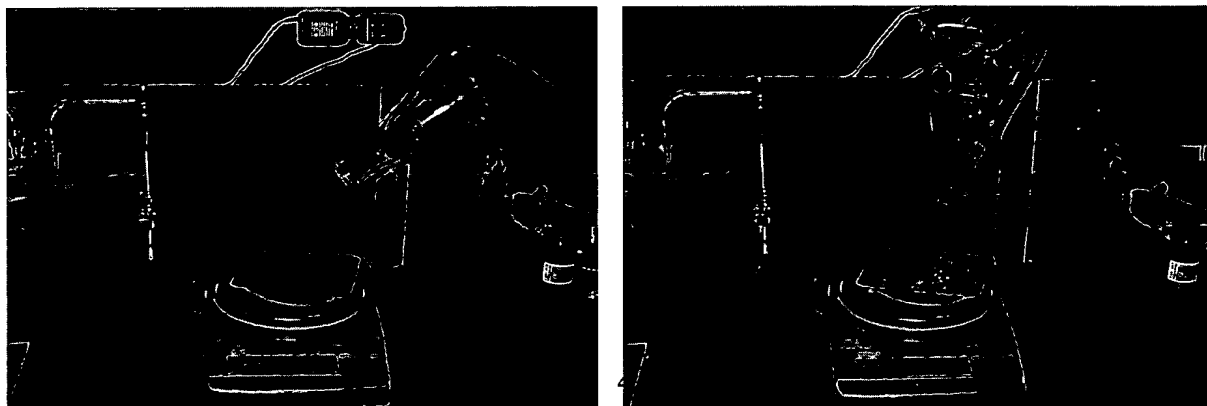


Figure 2. Coating sample A, (Harris). About half of the cottonseed flowed out.



Nov. 17, 2003 2:01PM AJINOMOTO USA, INC.

No. 2863 P. 6/6

Application No. 09/768,623
Reply to Office Action of May 16, 2003

8. The undersigned petitioner declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

9. Further deponent saith not.

Paul G. Summer

Signature

Nov. 17, 2003

Date